

ABSTRACT

An interface device for interfacing a user with a computer, the computer running an application program and generating a graphical image and a graphical object, comprises a user manipulatable object in communication with the computer, a sensor to detect a manipulation of the object, the sensor providing a signal to the computer to control the graphical image, and an actuator adapted to provide a haptic sensation to the palm of the user in relation to an interaction between the graphical image and the graphical object, the actuator comprising a member that is deformable to provide the haptic sensation. In another version, a mouse for interfacing a user with a computer generating a graphical environment comprising a graphical hand comprises a housing, a position detector to detect a position of the mouse, the position detector capable of providing a first position signal to the computer to control the position of the graphical hand in the graphical environment, and a finger position detector to detect a position of a finger of the user, the finger position detector capable of providing a second position signal to the computer to control a graphical finger on the graphical hand in relation to the position of the finger of the user.